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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,842	07/25/2003	Aaron Raines	019469.0234	2646

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BAKER BOTTS LLP
2001 ROSS AVENUE
6TH FLOOR
DALLAS, TX 75201

EXAMINER	
BROUSSARD, COREY M	

ART UNIT	PAPER NUMBER
2835	

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/627,842	RAINES ET AL.	
	Examiner	Art Unit	
	Corey M. Broussard	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) *1-8* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 July 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of 9-25 in the reply filed on 10/26/2004 is acknowledged.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 9, 10, 14-19 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busch (PN 5,510,806) in view of Novin et al (Us 2002/0167789). With respect to claim 9, Busch teaches a system for displaying an image at a display unit comprising: a hinge member (34) coupled to the imaging mirror (32) and a video source coupled to the display unit (10) to transmit the image to the display unit for reflection by a fold mirror (50) coupled to the housing toward the imaging mirror. Busch lacks a friction hinge assembly with varying friction according to the position of the hinge member. Novin teaches a hinge for a mounting a display consisting of: a mounting base (18) coupled to the housing of a display unit, the mounting base comprising of a longitudinal pin portion (36, 70); a hinge member (52, 86) positioned substantially around the pin portion, the hinge member comprising a support portion (54); wherein

the pin portion is configured to apply a friction caused by contact of the pin portion with the support potion of the hinge member; wherein the hinge member is configured to rotate about the pin portion from a first position to a second position without friction (paragraph [0032] lines 1-5); and wherein the hinge member is configured to rotate about the pin portion from the second position to a third position with friction (paragraph [0038] lines 1-4). It would have been obvious to a person of ordinary skill in the art to combine the display system of Busch with the hinge assembly of Novin to obtain a mirrored LCD projection display on a hinge that provides controlled rotation and angular positioning.

3. With respect to claim 10, Novin teaches a pin portion (36, 70) comprising of at least one corner (ends of 48) configured to contact the support portion of the hinge member (52, 86) to apply friction.

4. With respect to claim 14, Busch teaches that a liquid crystal display is used to project the image onto the fold mirror for reflection toward the imaging mirror (51 column 4 line 16).

5. With respect to claim 15 the method of rotating an imaging mirror (32) of a display unit (10) with a hinge assembly (34) is inherent in the structure of Busch. Busch lacks a friction hinge assembly with varying friction according to the position of the hinge member. The method of rotating with a friction hinge assembly is inherent in the structure of Novin, Novin teaches a rotating hinge member (52, 86) about a longitudinal pin portion (36, 70) of a mounting base (18) from a first position to a second position without friction caused by contact of the pin portion with a support portion of the hinge

member (paragraph [0032] lines 1-5), wherein the mounting base is coupled to a housing of the display unit, and wherein the hinge member is positioned substantially around the pin portion (see Fig. 3); and rotating the hinge member about the pin portion form the second position to a third position with the friction (paragraph [0038] lines 1-4). It would have been obvious to a person or ordinary skill in the art at the time of the invention to combine mirror display system of Busch with the friction hinge of Novin to obtain a mirrored display on a hinge that provides controlled rotation and angular positioning.

6. With respect to claim 16, Novin teaches that friction is caused by contact by at least one corner of the pin portion with the support portion of the hinge member (see fig. 3).

7. With respect to claim 17 and 18, Busch teaches the imaging mirror (32) is in a recessed position within the housing when the hinge member (34) is in the first position (when the display panel is closed against the keyboard, see Fig. 1) and where the mirror is fully deployed in the third position (open as in Fig. 1).

8. With respect to claim 19, Novin teaches where the hinge member (52, 86) comprises a mounting portion spaced apart from the support portion (sides 54, 88 of 52, 86 are spaced apart), the mounting portion coupled to the imaging mirror (see Fig. 3, hinge member 52 is coupled via 53 to the base).

9. With respect to claim 23, the method for displaying an image at a display unit is inherent in the structure of Busch and Novin, Busch teaches an image from a video source and projecting the image onto a fold mirror (50) coupled to the housing and

reflecting the image onto the imaging mirror (32). Busch lacks a rotating hinge member with variable friction. Novin teaches a hinge member (52, 86) about a longitudinal pin (36, 70) of a mounting base (18) from a first position to a second position without friction (paragraph [0032] lines 1-5) caused by contact of the pin portion with a support portion of the hinge member, and wherein the hinge member is positioned substantially around the pin portion (see fig. 3); and that rotating the hinge member about the pin portion from the second position to a third position with friction (paragraph [0038] lines 1-4). It would have been obvious to a person of ordinary skill in the art to combine the display system of Busch with the hinge of Novin to obtain a mirrored display on a hinge that provides controlled rotation and angular positioning.

10. Claims 11 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busch (PN 5,510,806) in view of Novin et al (Us 2002/0167789) and Vickers (PN 4,630,333). With respect to claim 11, the device of Busch as modified by Novin applied to claim 9 above lacks an adjustment screw to control the friction of the hinge member and longitudinal pin. Vickers teaches where the hinge member (25) comprises a mounting portion (24) spaced apart form the support portion (26), and further comprising an adjustment screw (31) inserted through the mounting portion and the support portion to control the friction (column 3 lines 20-26). It would have been obvious to a person of ordinary skill in the art to combine the mirrored display and hinge of Busch as modified by Novin and the adjustable friction hinge of Vickers to obtain a hinged display with an adjustable variable friction hinge for fine tuning the operation of the hinge after manufacturing.

11. With respect to claims 20-22, the method of Busch as modified by Novin applied to claim 15 above lacks using an adjustment screw to control the friction of the hinge member and longitudinal pin. Vickers teaches that the friction can be controlled with an adjustment screw (31) inserted through the mounting portion (24) and the support portion (26) where tightening the screw increases the friction by reducing the space between the support portion and the mounting portion, or where loosening the adjustment screw to decrease the friction by increasing the space between the support potion and the mounting portion (column 3 lines 20-26). It would have been obvious to a person of ordinary skill in the art to combine the mirrored display and hinge of Busch as modified by Novin and the adjustable friction hinge of Vickers to obtain a hinged display with an adjustable variable friction hinge for fine tuning the operation of the hinge after manufacturing.

12. Claims 12, 13, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Busch (PN 5,510,806) in view of Novin et al (Us 2002/0167789) as applied to claims 9 and 23 above, and further in view of Ashihara et al. (PN 5,883,739). With respect to claim 12, 13, 24, and 25, the device and method of Busch as modified by Novin applied to claim 9 and 23 above lacks the video source comprising a camera unit of an auxiliary vision system of a vehicle or global positioning satellite system. Ashihara teaches a display system where the video source comprises an auxiliary vision system (6) of a vehicle and/or a global positioning system (column 6 lines 26-27). It would have been obvious to use the mirrored display with variable friction hinge of Busch as modified by Novin to view the video signal of the vision system of Ashihara for

the benefit of a simple auxiliary vision system for a vehicle having a low cost of production.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Corey M. Broussard whose telephone number is 571 272 2799. The examiner can normally be reached on 7:30-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on 571 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cmb

LYNN FEILD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800